

REMARKS/ARGUMENTS

Claims 1-15 are pending. Claims 1-15 are rejected. Amended Claim 1 finds support in original claim 3 and the specification: pg 5, line 45 to pg 6, line 2. Amended Claim 2 finds support in the specification: pg 13, lines 8-13. Claim 3 is canceled without prejudice. Amended Claim 4 finds support in the specification: pg 5, line 45 to pg 6, line 2. No new matter has been entered.

Claim 1 as amended now includes the limitations of claim 3 and requires that only one isocyanate-reactive group and only one hydrophilic group be present.

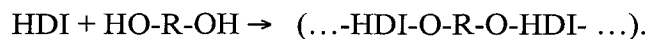
Claim 2 as amended requires that component (A) is present in the amount of from 30 - 90% by weight instead of 40 - 90% by weight. Therefore, the ranges now set forth workable endpoints; for example, if 60% of component (B) is present and the minimum amount of component (A) is present (30%), then 10% of component (C) is present which is in the claimed range for (C).

Regarding claims 4 and 5, Applicants define a hydrophilic group in reference to emulsifiers; the hydrophilic group being a group that is capable of emulsifying the polyisocyanate composition of (A), (B) and (C) (pg 5, lines 19-24). Even though a single ethylene oxide group may be considered a hydrophilic group in its broadest interpretation, as noted by Examiner Sergent, it should not be considered so in this case because a single ethylene oxide group would not be capable of emulsifying the polyisocyanate composition as required by Applicants' disclosure of hydrophilic. Therefore, the limitation to one hydrophilic group in claim 1 (originally claim 3) is not ambiguous when considered in conjunction with the further limitations of claims 4 and 5 and in view of the specification's definition of "hydrophilic group".

Accordingly, Applicants' amendments obviate the 35 U.S.C. § 112 rejection and the rejection should be withdrawn.

Regarding the 35 U.S.C. § 102 (b) rejection, *Haeberle* teaches polyisocyanates that are single polyisocyanates that are made up of hexamethylene diisocyanate (HDI) and isophorone diisocyanate (IPDI) radicals (see US 4,419,513, column 2, lines 50-60, as referenced by *Haeberle*, column 3, line 5, as EP-A 47452). In contrast, Applicants claim a mixture of multiple polyisocyanates; that mixture comprising HDI and IPDI as separate isocyanates. Accordingly, *Haeberle* fails to disclose Applicants' mixture.

Regarding the 35 U.S.C. § 103 (a) rejection, *Morikawa* teaches an isocyanate mixture of HDI and IPDI. However, *Morikawa* teaches the urethanation of the HDI with dihydric alcohol before mixing with IPDI (column 2, lines 27-35). Dihydric alcohol links two monomers (the same or different) together that each have two isocyanate groups, resulting in a polymer with monomer and dihydric alcohol units; for example:



This results in an HDI polymer of a higher molecular weight than just HDI itself. On the contrary, Applicants claim a lower molecular weight mixture of HDI (not HDI polymer) and IPDI. Also, a result of Applicants' mixture, which contains only one isocyanate-reactive group (see amended claim 1), is to bond the hydrophilic group to an isocyanate group; not the bonding of two isocyanates as taught in *Morikawa*. The bonding of a hydrophilic group to the isocyanate group would be counter-intuitive in light of *Morikawa*'s disclosure of dihydric alcohol being "hydrophobic" and being imbedded within the structure of the poly-HDI (column 6, lines 12-15). This particular disclosure by *Morikawa* would also result in a lack of motivation to combine *Morikawa* with the teachings of *Haeberle*. Accordingly, neither *Morikawa* nor the combination of *Morikawa* and *Haeberle* teach or suggest the HDI and IPDI mixture as claimed by Applicants.

Claims 2-15 are either directly or indirectly dependent on and include all the limitations of claim 1, which as currently amended is in allowable form.

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For the reasons discussed above, Applicants submit that all now-pending claims are in condition for allowance. Applicants respectfully request the withdrawal of the rejections and passage of this case to issue.


Respectfully submitted,

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